

05939

1 IN THE CIRCUIT COURT OF SHELBY COUNTY, TENNESSEE
2 FOR THE THIRTIETH JUDICIAL DISTRICT AT MEMPHIS

3
4 BOBBY NEWCOMB,

5 Plaintiff,

6 - vs - Case No. 88913-8 T.D.

7 R.J. REYNOLDS TOBACCO COMPANY, and
8 THE BROWN AND WILLIAMSON TOBACCO
9 COMPANY, as successor by merger to
10 THE AMERICAN TOBACCO COMPANY,

11 Defendants.

12
13 Before: The Honorable D'Army Bailey

14
15 TRANSCRIPT OF PROCEEDINGS

16 March 24, 1999
17 (Afternoon Session)

18
19 Volume 38

20
21 ALPHA REPORTING CORPORATION
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1
2 EDITH KARNEY, Individually, and
3 On behalf of the Estate of
4 JAMES WILEY KARNEY,

5 Plaintiffs,

6 - vs - Case No. 89196-8 T.D.

7 PHILIP MORRIS, INC., and
8 PHILIP MORRIS COMPANIES, INC.,
9 Defendants.

10 RUBY SETTLE, Individually, and
11 On behalf of the Estate of
12 RAYMOND SETTLE,

13 Plaintiffs,

14 - vs - Case No. 89226-8 T.D.

15 B.A.T. INDUSTRIES, PLC; BATUS HOLDINGS,
16 INC.; BROWN & WILLIAMSON TOBACCO
17 CORPORATION; BRITISH AMERICAN TOBACCO
18 COMPANY, L.T.D.,

16

Defendants.

17

18 DENISE McDANIEL, Individually,
and On behalf of the Estate of

19 FLORENCE BRUCH,

20 Plaintiff,

21 - vs -

Case No. 90832-8 T.D.

22

BROWN AND WILLIAMSON TOBACCO

23 CORPORATION, and

PHILIP MORRIS, INC.,

24

Defendants.

25

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(At 2:07 p.m., on the 24th day of
March, 1999, Court met, pursuant to adjournment,
when and where the following proceedings occurred,
to wit:)

(Out of the presence of the jury.)

THE COURT: All right, lawyers. Are we
ready for the jury?

MR. WILNER: Yes, Your Honor.

MR. JAMES JOHNSON: Yes, Your Honor.

(Whereupon, the jury was seated in the
jury box.)

THE COURT: Thank you, ladies and
gentlemen.

And I understand Ms. Block has a birthday
today, so happy birthday.

All right. We're ready to have the
cross-examination, and we'll call on Mr. Wilner.

MR. WILNER: Thank you, Your Honor.

(Next page, please.)

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DAVID TOWNSEND,

2 having been previously duly sworn by the Clerk to
3 tell the truth, the whole truth and nothing but the
4 truth, returned to the witness stand and testified
5 as follows:

6 CROSS-EXAMINATION

7 BY MR. WILNER:

8 Q. Dr. Townsend, you know who I am?

9 A. Yes, I do.

10 Q. We've met before?

11 A. We have.

12 Q. We've even met before in the context of a
13 lawsuit, have we not?

14 A. Yes.

15 Q. And will you understand, sir, that if I
16 challenge your opinions and beliefs, I'm not
17 necessarily challenging your person or your
18 personality?

19 A. I understand.

20 Q. When we met in the hall again and I shook
21 hands with you yesterday, I detected a faint odor
22 of cigarettes on your person. Are you still
23 smoking?

24 A. I smoke cigarettes, yes.

25 Q. What kind do you smoke? R.J. Reynolds

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1 brand, I hope?

2 A. I generally smoke Salem Ultra Lights.

3 Q. How many a day do you go through?

4 A. It varies considerably. I would say
5 typically a pack, pack and a half. There are times
6 on the weekends I hardly ever smoke.

7 Q. Is there a policy about cigarette smoking
8 inside of R.J. Reynolds?

9 A. No. Of course not.

10 Q. So you can -- you know, you can sit in
11 one of these scientific meetings that you have and
12 everybody's lighting up? Is that the way it works?

13 A. Those people who choose to smoke within
14 Reynolds can smoke in most areas. Now, there are
15 places in the laboratory where you can't obviously
16 because of contamination issues or fire hazards or
17 for a number of reasons. Quite a few people at
18 Reynolds don't smoke.

19 Q. What do they do when they sit there in
20 these meetings and everybody else is smoking and
21 blowing the smoke all around?

22 A. I'm sorry. I don't understand your
23 question.

24 Q. Well, I mean, do they have any right to
25 say, "Wait a minute, you know, this is terrible"?

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1 "I can't stand it"?

2 A. I'm sorry. I still don't understand your
3 question.

4 Q. Does Reynolds have a policy to protect
5 the people who don't smoke from the effect of
6 everybody else's smoke?

7 A. The people that work at Reynolds who
8 choose to smoke can smoke in most places except for
9 certain laboratories. Those people who choose not
10 to smoke make their own choice. We have
11 ventilation systems in our rooms, if that's what
12 your question is about, to try to minimize the

13 annoyance of cigarette smoke.
14 I don't understand your question. I'm
15 sorry.
16 Q. Well, I'm just trying to see what, you
17 know, Reynolds -- We've been talking about Reynolds
18 and what kind of things they do there. And I'm
19 just trying to figure out if they try and protect
20 the people at Reynolds who don't smoke from the
21 effect of the smoke generated by you?
22 THE COURT: Excuse me.
23 MR. JAMES JOHNSON: Objection,
24 Your Honor, relevance, and it's also been asked and
25 answered.

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1 THE COURT: Overruled.
2 Q. BY MR. WILNER: Do they try and protect
3 these people or not?
4 A. There are ventilation systems in
5 conference rooms to reduce the smoke levels, as
6 there are in a lot of smoking areas, for example,
7 in bars and other places.
8 Q. Does Reynolds have a position as to
9 whether the smoke that you smoke in front of
10 somebody else and blow smoke at them, whether that
11 is a health risk to those people?
12 A. Well, I think there's been considerable
13 amount of discussion in the scientific literature
14 about whether or not sidestream or environmental
15 tobacco smoke is a risk for others.
16 I do know that there was an EPA
17 report -- I'm not an epidemiologist, but I
18 understand that EPA report concluded that cigarette
19 smoking was a risk. I also do know that there was
20 a federal court that overturned that EPA report.
21 Q. Oh, the Courts overturned it. I guess I
22 didn't ask my question well enough. I'll try
23 again.
24 Reynolds, who you work for, what's their
25 position?

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1 A. On environmental tobacco smoke exposure?
2 Q. Well, you call it environmental. I just
3 call it blowing smoke in somebody's face. What's
4 their position?
5 A. Epidemiologists, scientists at
6 R.J. Reynolds, statisticians have looked at the
7 available evidence on environmental tobacco smoke
8 and have concluded that the evidence is not there
9 that environmental tobacco smoke is a risk. It's
10 clear that mainstream smoke, that is, active
11 smoking is a clear and strong risk.
12 Q. So I'm going to move on to what you call
13 mainstream smoke or active smoke in a minute. But
14 I just want to make sure I heard you completely.
15 Reynolds's position now is that it's basically
16 okay, it doesn't hurt you, you can blow all the
17 smoke you want in somebody else's face, right?
18 A. I don't think that's a fair
19 characterization of what I said. What I said was
20 there are statisticians that look very carefully at
21 the epidemiology of environmental tobacco smoke
22 exposure and have concluded that the evidence is
23 not there, that ETS or environmental tobacco smoke

24 exposure is a risk for disease. That's consistent
25 with the overturning of the EPA report actually.

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1 Q. Would it be fair to say that if you don't
2 like smoking you shouldn't work at Reynolds?

3 A. Well, I don't know what you mean by
4 that. I've already said there are a number of
5 people at Reynolds who don't smoke.

6 Q. Is it Reynolds -- now Reynolds' position
7 that cigarette smoking is a risk for lung cancer?

8 A. Well, Mr. Wilner, I think it's been
9 Reynolds' clear position for a long time based on
10 the epidemiology that cigarette smoking is a risk
11 for lung cancer and for other diseases.

12 Q. Well, is --

13 A. That's been in existence for a long time
14 because the epidemiology which began to come
15 together in the early 50s, as it mounted, it became
16 very clear that cigarette smoking is a risk.

17 Q. Well, why did Reynolds take the public
18 position that cigarette smoking was a risk for lung
19 cancer?

20 A. Are you talking about when was the first
21 time? I don't know the answer to that. But the
22 clear evidence -- The epidemiology is strong.
23 Cigarette smoking is a risk for lung cancer and for
24 other diseases. Our company has not disputed the
25 epidemiology that I've seen.

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1 Q. That you've seen?

2 A. That's right.

3 Q. So you've looked at what public
4 statements have been made by the company?

5 A. Well, I've looked at some public
6 statements. I'm certainly not an expert in that
7 area.

8 Q. You know who the Tobacco Institute is,
9 right?

10 A. I'm aware of some parts of the Tobacco
11 Institute, yes.

12 Q. You're aware of some parts of it?

13 A. Yes.

14 Q. Well, you know it's an organization that
15 all the U.S. cigarette companies got together to do
16 their public relations? Don't you know that?

17 A. The Tobacco Institute has provided
18 several functions, including public relations.

19 Q. Okay. And you know they've
20 given -- they've made all sorts of public
21 statements about whether cigarette smoking is
22 hazardous, right?

23 A. Tobacco Institute has made a number of
24 public statements. I couldn't sit here and catalog
25 the statements they've made.

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1 Q. Okay. And do you take the position that
2 Reynolds was not part of the Tobacco Institute?

3 A. We've supported the Tobacco Institute.

4 Q. Do you have anything that the Tobacco
5 Institute has said that you're willing to get up
6 here and renounce?

7 A. I'm not sure I understand that question,
8 Mr. Wilner. What are you talking about

9 specifically?

10 THE COURT: Excuse me, Doctor. It might
11 help if you pull that mike forward there.

12 THE WITNESS: Sorry, Your Honor.
13 I'm sorry. I don't understand your
14 question. Can you be specific?

15 Q. BY MR. WILNER: Well, you know, you're
16 talking about what the public position of Reynolds
17 and the Tobacco Institute has been. Is there
18 anything now that you, sitting up here today, want
19 to say, "That's no longer our position, we renounce
20 that, we don't agree with it," something the
21 Tobacco Institute has said?

22 THE COURT: Just a minute, please.

23 MR. JAMES JOHNSON: Objection,
24 Your Honor. I believe that's an unfair question,
25 asking this witness to keep in mind every position,
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1 known or unknown, that the tobacco industry or the
2 Tobacco Institute has made.

3 THE COURT: Overruled.

4 Q. BY MR. WILNER: How about it?

5 A. I'm sorry. Can you ask the question,
6 please?

7 Q. Do you want to take anything back that
8 the Tobacco Institute said?

9 THE COURT: I might say in overruling,
10 I'm obviously talking only about what he's aware
11 of. So if he's not aware, then it doesn't cover
12 it.

13 MR. JAMES JOHNSON: Yes, sir.

14 THE WITNESS: Well, Mr. Wilner, I've
15 already said that I'm not a -- you know, I'm not
16 familiar with everything that's ever been said by
17 my company, even more so by the Tobacco Institute.
18 I'm a scientist. I'm a chemist. And I certainly
19 don't go out and read everything that's ever been
20 said in the history of the tobacco industry. So I
21 can't answer your question.

22 Q. BY MR. WILNER: Well, all right. Let me
23 just give you some examples.

24 MR. WILNER: Counsel, I'll be asking
25 questions from our volume entitled "Public
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1 Statements" that you have a copy of.

2 MR. JAMES JOHNSON: Do you have an
3 exhibit number for that?

4 MR. WILNER: It's Tab 28.

5 MR. JAMES JOHNSON: Is it in evidence?

6 MR. WILNER: I don't want to correspond
7 with you anymore, but it's an exhibit we'll be
8 showing the witness.

9 MR. JAMES JOHNSON: Your Honor, I object
10 to the display of any documents that are not
11 exhibits in the case.

12 MR. WILNER: Okay.

13 THE COURT: Well, I think that's a fair
14 objection, and I think that's among the rules of
15 the game that we're playing by, so anything that's
16 shown should be an exhibit.

17 MR. WILNER: We're not going to show it
18 to the jury until he looks at it, Your Honor.
19 May I approach to get or ask the sheriff,

20 please, to hand this -- That was our intent, of
21 course.
22 Q. BY MR. WILNER: All right, sir. I would
23 ask you to turn to Tab 28.
24 A. Okay. I'm there.
25 Q. And I ask you if you recognize this

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1 document, which is "Where the Tobacco Industry
2 Stands," by Earle Clements, president of the
3 Tobacco Institute, dated 1967?
4 A. I don't remember ever seeing this, no.
5 Q. Okay. Well, when you were talking about
6 what Reynolds has said over the years or their
7 public position, does it include the last
8 paragraph? You go ahead and read it, just read it
9 to yourself.
10 A. You want me to read the last paragraph?
11 Q. Read it to yourself. Since Counsel
12 objects to this, read it to yourself.
13 MR. JAMES JOHNSON: Objection,
14 Your Honor, to the characterization.
15 THE COURT: Sustained.
16 THE WITNESS: You want me to read the
17 last paragraph on the first page or the last
18 paragraph on the document?
19 MR. WILNER: The first thing I'll do,
20 Your Honor, is offer it. That will make it a lot
21 easier.
22 MR. JAMES JOHNSON: I object,
23 Your Honor. There's been no foundation for the
24 document.
25 MR. WILNER: Well, we haven't had a

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1 chance to offer the foundation. May I offer it?
2 THE COURT: Well, let me see the
3 document.
4 Yes, you may offer foundation.
5 Q. BY MR. WILNER: Do you see on that
6 document "Produced by RJRTC"?
7 A. Yes, I do.
8 Q. Who is RJRTC?
9 A. R.J. Reynolds Tobacco Company.
10 Q. The company you work for?
11 A. Yes.
12 Q. And it says, "Produced in Carbonick
13 (phonetic)." Do you see that?
14 A. That's correct.
15 Q. That's a case you worked on, isn't it?
16 A. That's a case I testified in, the same as
17 I've testified here today.
18 Q. Okay. And you see the picture of Earle
19 Clements, president of the Tobacco Institute?
20 A. I see that.
21 Q. And Reynolds was a member of the Tobacco
22 Institute on that year, right, 1967?
23 A. My best guess would be yes.
24 Q. And Reynolds has never publicly denied
25 this statement to your knowledge?

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1 A. This statement being which specifically?
2 Q. The statement where it says where the
3 tobacco industry stands, the one you've got in your
4 hands?

5 A. I'm sorry. That's not specific. What
6 are you talking about?
7 Q. Any of it.
8 THE COURT: Well, I think we're talking
9 about two different things now, the foundation
10 versus whatever the use that's intended to be made
11 of the statement. So let's deal with the first
12 one. We issued the exhibit, and the Court will
13 admit the document and have it marked, so let's
14 take care of that business first.
15 MR. WILNER: Thank you, Your Honor. We
16 offer it.
17 MR. JAMES JOHNSON: We object. This
18 witness has said he's never seen the document
19 before, Your Honor.
20 THE COURT: Well, that's only -- We're
21 only talking now as to the foundation of the
22 document itself. Now, I don't know what inquiry he
23 intends to make of the witness with respect to the
24 documents. You can, of course, make the
25 appropriate objection, depending upon what the
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1 questions are.
2 MR. JAMES JOHNSON: Yes, sir.
3 MR. WILNER: May we have it marked?
4 THE COURT: Yes.
5 (Whereupon, Exhibit Number 263 was marked
6 for identification.)
7 Q. BY MR. WILNER: So let me ask you, then,
8 about the last paragraph on page 1, beginning, "The
9 theory." This is 1967.
10 MR. WILNER: First, if we could show,
11 Jenny, the picture of Mr. Clements.
12 Q. BY MR. WILNER: Do you know who
13 Earle Clements was?
14 A. No, I don't. Never met him.
15 Q. You don't recognize him? Never talked to
16 him?
17 A. No.
18 Q. Let's go to the last paragraph here, and
19 blow it up.
20 "The theory about smoking."
21 "The theory about smoking is still
22 largely based on statistical association studies
23 which are subject to question. Extensive clinical
24 and laboratory research over the past several or
25 dozen years has failed to provide a sufficient
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1 basis to show a cause-and-effect role for
2 smoking." Was that Reynolds' position in 1967?
3 A. I really don't know what Reynolds'
4 position was on smoking and health and causation in
5 1967. I do know that R.J. Reynolds'
6 scientists -- and we've covered some of this
7 yesterday and today -- have clearly understood that
8 cigarette smoking is a risk for a number of
9 diseases, and we've acted on that in the laboratory
10 through cigarette design.
11 Q. That's fine. Now, I'm asking you what
12 they've been telling the public. You understand
13 that. That's what I'm asking you. So let me go
14 on.
15 Was that Reynolds' position today? Or

16 has it changed?
17 A. Well, let me break this down, and I think
18 that will answer your question very directly. The
19 statistical association to me means the
20 epidemiology. That's clear. The epidemiology is
21 strong that cigarette smoking is a risk. I think
22 there are some missing pieces to fully establish
23 causation. So I think there's some truth to that.

24 R.J. Reynolds' position clearly is
25 cigarette smoking is a strong risk. It may cause

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1 cancer. It may contribute, along with other risks,
2 to causing cancer. And that's, frankly, what I
3 personally believe after looking at the information
4 I've seen.

5 Q. "Laboratory research over the past dozen
6 years has failed to provide a sufficient scientific
7 basis to show a cause-and-effect role for
8 smoking." Is that true today? Or have changes
9 changed --

10 A. In a very strict scientific point of
11 view, from that point of view there are two things
12 missing that classically establish causation. One
13 is an animal model. Inhalation experiments with
14 animals have yet to reproducibly cause lung
15 tumors. Also scientists don't understand or don't
16 know a mechanism of how cigarette smoking can cause
17 that disease, could cause that disease. It's
18 irrefutable, however, that cigarette smoking is a
19 risk. What that means to me -- and I'm not a
20 biological scientist. I'm not a statistician or
21 epidemiologist. What that means to me is that
22 cigarette smokers as a group have a higher
23 incidence of lung cancer than certain other
24 diseases. There's no question about it. Exactly
25 why that's the case is unknown. But most people in

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1 the public health community have concluded that
2 cigarette smoking in fact causes those diseases.
3 And what I just told you is, I believe, personally,
4 that it may. It may cause --

5 Q. That it may?

6 A. That cigarette smoking may cause those
7 diseases. Or it may even contribute, along with
8 other risks, to causing cancer and other diseases.

9 Q. So are you in doubt?

10 A. In doubt about what, sir?

11 Q. About whether or not it causes cancer?

12 A. I think I've just answered your
13 question. I told you what I believe about whether
14 cigarette smoking causes cancer.

15 Q. Well, answer my question if you could.
16 Are you in doubt about whether cigarette smoking
17 causes cancer because I couldn't follow your
18 answer?

19 THE COURT: Excuse me.

20 MR. JAMES JOHNSON: Objection. Asked and
21 answered twice already.

22 THE COURT: Overruled.

23 Q. BY MR. WILNER: Are you in doubt?

24 A. Well, I think I made my answer very clear
25 in the previous answer.

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1 Q. Well --
2 A. And let me finish.
3 Q. Excuse me, sir. Can you answer my
4 question?
5 A. I am answering your question. Please let
6 me finish.
7 Cigarette smoking is a risk. There is no
8 question about it. And I've already said that
9 cigarette smoking by itself may cause cancer. I
10 don't know for sure. I'm not a biological
11 scientist. I do know that we don't know how cancer
12 is formed. I think science is getting very close
13 to understanding that, particularly in the genetic
14 sciences. They're trying to understand how chronic
15 cancers like lung cancer and other cancers are
16 formed and the genetic basis for it. But I
17 personally don't know whether it, cigarette smoking
18 by itself, in itself, causes cancer or whether it's
19 a combination of smoking and other risks together
20 in a contributory way may result in cancer. I just
21 don't know. But it may.

22 Q. All right. I want to represent to you
23 that Robert K. Heimann, the CEO of American Tobacco
24 Company, testified by deposition in this courtroom
25 in a deposition that was taken in 1986 that, "To
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1 the extent that we believe" -- speaking for the
2 American Tobacco Company -- "our products are not
3 injurious to health." Now, assuming that to be
4 testimony given in this case, you agree with that?
5 Would you say the same thing for Reynolds? "We
6 believe our products are not injurious to health"?
7 Or would you not say that?

8 A. I would not say that.

9 Q. Well, then, would Reynolds not have said
10 that in 1986?

11 A. I don't believe my company would say that
12 today. I don't know about 1986.

13 Q. Well, you were there?

14 A. I was there.

15 Q. So what's changed? Are you saying things
16 have changed? You would have said it in 86 but not
17 now?

18 A. I'm saying I don't know.

19 Q. Don't know?

20 A. That's right.

21 Q. Well, you've been involved in this since
22 1986. Have you had some kind of a revelation since
23 1986?

24 MR. JAMES JOHNSON: Objection,
25 Your Honor, argumentative and repetitious.
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1 THE COURT: Overruled.

2 THE WITNESS: I've been at R.J. Reynolds
3 since 1977. And I've seen -- What I've seen is
4 most people within R.J. Reynolds agree without
5 question, without question because the statistics
6 are strong that cigarette smoking is a risk, and
7 that cigarette smoking may cause those diseases.
8 That's what I've seen.

9 Q. BY MR. WILNER: So if Mr. Heimann had
10 come over to R.J. Reynolds and said, "Look, guys,
11 we believe we're taking the public position our

12 products are not injurious to health,"
13 R.J. Reynolds would say, "No, I don't think you
14 should do that," right?
15 A. I think that's exactly correct. I don't
16 think my company would make that statement today as
17 we sit here.
18 Q. Now, let's talk a little more about
19 causation. You've used the Surgeon General's
20 reports in your direct testimony I don't know how
21 many times, about six or ten times. You've talked
22 about the Surgeon General of the United States;
23 remember that?
24 A. I referred to the Surgeon General several
25 times, that's correct.

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1 Q. Okay. And, in fact, when you refer to
2 the Surgeon General's report, there are many more
3 than one Surgeon General reports over the years,
4 right?
5 A. Yes.
6 Q. How many?
7 A. Well, the first one was in 1964. There
8 has been one almost every year since.
9 Q. You've got them all?
10 A. I beg your pardon?
11 Q. You have them all in your office, I hope?
12 A. Not in my office, in my library.
13 Q. So you can refer to them?
14 A. That's entirely possible, yes.
15 Q. Okay. And you do refer to them?
16 A. Yes.
17 Q. Okay. So you recognize, then, the 1964,
18 which was the first one, right?
19 A. The first Surgeon General report was
20 issued in 1964.
21 Q. Do you recognize this one? Actually this
22 is not the same color as the original because we've
23 had it photocopied. But you recognize it, right?
24 A. From here my glasses don't work as well.
25 Q. Smoking and health, report of the

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1 Advisory Committee of the Surgeon General of the
2 Public Health Service, U.S. Department of Health,
3 Education & Welfare, Public Health Service, same
4 one, right?
5 A. That's the same one.
6 Q. And you know how this one came about,
7 don't you?
8 A. I don't know what you mean.
9 Q. Well, you know about the --
10 A. Are you talking about the circumstances
11 behind it?
12 Q. Well, let me see what you do know. You
13 know that President Kennedy appointed the
14 Surgeon General's Advisory Committee on Smoking and
15 Health? You know that?
16 A. No, I didn't.
17 Q. No? You know that there were scientists
18 picked to serve on this Advisory Committee of
19 Smoking and Health from various scientific
20 disciplines?
21 A. I knew that.
22 Q. Mostly physicians?

23 A. In general I would agree with that.
24 Q. Okay. And you know that they went around
25 in the two years or so leading up to the
05966
1 publication of this report and tried to get all of
2 the available published and unpublished literature
3 on the subject of smoking and disease?
4 A. I knew it involved extensive literature
5 compilations.
6 Q. And I was going to ask you this in a
7 second, but are you taking the position in your
8 testimony that Reynolds has agreed with the
9 Surgeon General of the United States in the various
10 reports that have been published?
11 A. Oh, I think like any person or any report
12 or compilation of any kind of scientific
13 information or otherwise, I think there is some
14 things that I personally tend to agree with.
15 There's some things I don't agree with. I think
16 that's normal.
17 Q. Well, let's see if we can get to the
18 heart of the matter.
19 A. Okay.
20 Q. We have another copy, or --
21 Okay. So what I'm going to do is I'm
22 going to ask you first about a particular
23 conclusion in the report, and I'll read it to you
24 first.

25 Page 37, "Cigarette smoking is causally
05967
1 related to lung cancer in men. The magnitude of
2 the effect of cigarette smoking far outweighs all
3 other factors. The data for women, although less
4 extensive, point in the same direction."
5 Now, that really is three statements. So
6 let me ask you, again, one at a time. One, you
7 agree or disagree to Reynolds' first proposition,
8 "Cigarette smoking is causally related to lung
9 cancer in men"? Just that statement.
10 A. I think most people have concluded that.
11 I believe it may.
12 Q. You believe it may, but you're not sure?
13 A. I said I believe it may.
14 Q. Is that Reynolds' position or your own
15 position?
16 A. I would say that most people in Reynolds
17 have that position, many people. It is my personal
18 position.
19 Q. Is that Reynolds' public position?
20 A. Some people at Reynolds have made that
21 statement publicly.
22 Q. The magnitude of the effect of cigarette
23 smoking far outweigh -- far outweighs all other
24 factors, true?

25 A. I don't know. I'm not an
05968
1 epidemiologist. I know cigarette smoking is a
2 strong risk factor. I believe it to be one of the
3 strongest. I don't know whether it far outweighs.
4 That's not my area.
5 Q. Well, when you say that's not your area,
6 certainly you, as a cigarette designer, have got to
7 know what the hazards of the product are, don't

8 you?

9 A. In a general sense, you're absolutely
10 correct. And I know that cigarette smoking is a
11 risk for lung cancer, emphysema, cardiovascular
12 disease. And I know there's various theories
13 around each one of those diseases about why
14 cigarette smoking may cause those. I know that in
15 trying to go about cigarette design modifications
16 to try to address each of those theories to
17 reducing those constituents in smoking.

18 Q. Well, we'll get to the constituents.
19 What I want to do is see if I can pin you down on
20 this point here. "The magnitude of the effect of
21 cigarette smoking far outweighs all other
22 factors." Now, let me ask you this: You mean,
23 from a cigarette design point of view, it doesn't
24 matter to you whether it far outweighs all factors?

25 MR. JAMES JOHNSON: Objection.

05969

1 THE COURT: Sustained.

2 Q. BY MR. WILNER: You said that you just
3 didn't know --

4 A. I said --

5 Q. -- that's true or not, right?

6 A. I said statistics, epidemiology is not my
7 area of expertise. I did tell you what I do know,
8 that it's a very strong risk, and I don't know
9 whether it's the strongest or not.

10 Q. Well, you testified earlier, you said
11 something about statistics and epidemiology. The
12 issue of the hazards of the product is not limited
13 to statistics in epidemiology, is it?

14 A. I'm not sure I understand that question.

15 Q. Well, the laboratory investigation on
16 hazards -- There's been clinical observation on
17 hazards that it's not limited to epidemiology? Or
18 do you think it is?

19 A. Again, you're outside my area. I'm a
20 cigarette designer. I don't understand your
21 question.

22 Q. Okay. So the third part of this -- I'll
23 write down an "I don't know" for the second. Is
24 there anybody at Reynolds who does, who knows
25 better than you?

05970

1 A. Oh, yeah. They have experts in the area
2 of smoking and health. We have experts in
3 statistics, people that follow epidemiology very
4 clearly, people that understand the biology. We
5 have scientists that are conducting basic research
6 in trying to understand the mechanisms behind the
7 disease. We have quite a lot. We have a lot of
8 experts.

9 Q. Do you have pulmonary doctors?

10 A. We don't have any pulmonary doctors, no.

11 Q. The last one says, "The data for women,
12 although less extensive, point in the same
13 direction." Do you accept that the effects of
14 cigarette smoking on lung cancer do not
15 discriminate between men and women?

16 A. Again, you're really outside my area. I
17 guess logically or in my gut it would be hard for
18 me to imagine how cigarette smoking, if it caused

19 lung cancer, would discriminate.
20 Q. Has Reynolds ever taken the position that
21 women don't get lung cancer, and that's a -- from
22 cigarettes -- and that's a reason that causation
23 doesn't apply?

24 A. I've never seen that at all.

25 Q. If they -- If Reynolds had said that,

05971

1 they would be wrong, wouldn't they?

2 A. Again, I've never seen that at all. It
3 would be hard for me to engage in a debate over
4 that because I don't know.

5 Q. Okay. All right. Well, then let's talk
6 about something that maybe you do know. You've
7 never said -- Or you've said that Reynolds accepts
8 that cigarette smoking is a risk for lung cancer.
9 Did I get that right?

10 A. Yes, except you've implied that it now
11 accepts it. I think it's clear in what I've seen
12 in the research and development department
13 documents is that we've understood that cigarette
14 smoking is a risk for many, many years. That's why
15 we've done the design modifications that we've
16 done. That's why we've done research.

17 Q. Oh, so you've seen it in research and
18 development documents that are not public, right?

19 A. I've seen in research documents the clear
20 understanding that cigarette smoking is a strong
21 risk. It goes back many, many, many years within
22 R&D. And I think I made it clear -- at least I
23 hope I made it clear in my direct testimony that
24 the smoking and health issue -- The fact that
25 cigarette smoking is a risk is why we've done what

05972

1 we've done. We've responded through cigarette
2 design changes to try to reduce the risk to
3 smoking.

4 Q. And, honestly, I was just asking you
5 whether you saw it in documents that are not
6 public, and you got all the way over to what you've
7 done. Can we stay with maybe what I asked?

8 A. Well, but what you asked was implying
9 that we only recently have decided that cigarette
10 smoking is a risk, and that's not true. That's
11 false.

12 Q. And I'm going to ask you about that. So
13 what you're telling us, then, is in private, in
14 your research documents you've admitted that it's a
15 risk?

16 A. It's clear in research documents that
17 cigarette smoking is a risk, just like in the
18 external literature. And, in fact, our internal
19 understanding of the risks is a reflection of all
20 of those epidemiological experiments that have been
21 conducted over many years.

22 Q. Now, if I walked into R.J. Reynolds and
23 asked to see your research files and I didn't have
24 a court order, what would you do with me?

25 A. I don't think we'd show you any files.

05973

1 Q. So these research files that you're
2 talking about, they're not anything that the public
3 has had access to, right?

4 A. We have a lot of different types of
5 documents. It's a highly proprietary -- Or it's a
6 highly competitive industry.
7 Q. I hate to interrupt, but I'm just trying
8 to get an answer. Does the public have access to
9 them? That's all.
10 THE COURT: Just a minute, please. Well,
11 I think he's answered that question.
12 MR. WILNER: Well, I don't know if he's
13 answered or not, Your Honor, but if you say so.
14 THE COURT: Well, he said if you didn't
15 have a court order he wouldn't let you see them.
16 MR. WILNER: I'm not the public, though.
17 I guess I'm persona non grata.
18 Q. BY MR. WILNER: All right. Public won't
19 see them.
20 MR. JAMES JOHNSON: Objection,
21 Your Honor.
22 THE COURT: All right. Well, let's do
23 this: I'll let you ask the question one more
24 time.
25 Q. BY MR. WILNER: Okay. I think we know

05974

1 the answer, and I won't even bother because I'll
2 move on.
3 All right. So let me -- All right. I'll
4 come back. Now, but here's what I want to ask:
5 You've said -- This is all I was doing was leading
6 into this question. You've said that Reynolds
7 acknowledges that cigarette smoking is a risk. And
8 I'm going to ask you some questions to try to
9 explore what Reynolds' position is on this. Okay?
10 All right.
11 Now, you'll agree with me, I hope, I
12 guess, that not all risks are the same, right?
13 A. I think that's fair.
14 Q. Well, I mean, I could have a risk of
15 being hit by lightning in broad daylight under a
16 clear sky, and it could happen, right?
17 A. It's entirely possible. I said I think
18 the answer to your first question was it's fair.
19 Q. But it's not the same as if I go lie down
20 on Interstate-40 and try to go to sleep in the
21 middle of the road. That's a big risk, right?
22 A. I would consider that a real big risk.
23 Q. All right. So not all risks are the same
24 or should be treated the same, right?
25 A. I don't know what you mean by "treated."

05975

1 I think clearly there are different magnitude
2 risks. That's exactly right.
3 Q. Okay. So now I'm going to ask you how
4 you measure the magnitude of risk of the product
5 that your company makes and sells?
6 A. Me personally?
7 Q. Well, start there.
8 A. I don't because I'm not an
9 epidemiologist.
10 Q. Well --
11 A. I'm a chemist.
12 Q. You may be a chemist, but are you telling
13 us now you don't have a clue as to what the
14 magnitude of the risk is?

15 A. That's not fair. What I've already said
16 is that the risk is strong. It's very strong. I
17 know it's a high risk compared to the other risks.
18 If you want to ask me about details of
19 what the risk factors are, the magnitude of the
20 risk factors, I don't know.
21 Q. Well --
22 A. I'm not a statistician.
23 Q. You would be -- Do you feel that
24 it's -- that the magnitude of the risks of the
25 product you design is not critical to the way that
05976

1 it's designed?
2 A. I'm not sure I understand that question.
3 What do you mean "not critical to the way it's
4 designed"?
5 Q. Yeah. I mean, your knowledge of the
6 amount of the hazard has got to be something that
7 you take into account when you design the product.
8 Am I wrong?
9 A. As a cigarette designer, you are wrong.
10 We've assumed that it's a very strong risk.
11 There's no question about that. And to accomplish
12 our job we look at the theories like the
13 benzopyrene theory, and we reduced the levels of
14 these compounds to try to reduce that risk.
15 Q. Well, we'll get to the benzopyrene theory
16 in a minute. But I'm just curious about this. You
17 market a product called the Winston cigarette.
18 Recognize it?
19 A. We market Winston, yes.
20 Q. Okay. So what I want to know is of the
21 people who buy and use this product in the way that
22 you intend them to use it regularly, they regularly
23 use it, how many of the people, let's say, out of a
24 hundred who use it will die prematurely of a
25 disease caused by that product?

05977

1 THE COURT: All right. Just a minute,
2 please, sir.
3 MR. JAMES JOHNSON: Your Honor. He's
4 already said that he is not a statistician or
5 epidemiologist, and so I object to the question.
6 THE COURT: Overruled.
7 Q. BY MR. WILNER: How many?
8 A. Mr. Wilner, you're asking the wrong
9 witness. I don't know the answer to that.
10 Q. Well, you certainly have the answer
11 available to you, don't you, whether you choose to
12 look at it or not?
13 MR. JAMES JOHNSON: Objection,
14 Your Honor.
15 THE COURT: I sustain that objection.
16 MR. WILNER: All right. Well, we'll see
17 what we can do.
18 Q. BY MR. WILNER: Let me hand you, then,
19 Dr. Townsend, or let me first ask you whether you
20 recognize it, the 1989 Surgeon General report?
21 A. I have seen the 89 Surgeon General
22 report.
23 Q. Okay. I would like to hand it to the
24 witness.
25 Now, you talk all about -- Excuse me,

05978

1 Doctor. You talked all about the Surgeon General
2 reports in your direct testimony. And I wonder,
3 did you include that one?

4 A. I don't remember referring to the 89
5 Surgeon General report. I made several references
6 to others, however.

7 Q. Well, the 89 Surgeon General report
8 is -- was a compilation of the knowledge available
9 to the scientific and medical community on smoking
10 and health issues as of the time of its acceptance
11 by the secretary of health and human services,
12 Otis R. Bowen, M.D., stamped December 29th, 1988?

13 MR. JAMES JOHNSON: Objection --

14 Q. BY MR. WILNER: Do you agree?

15 MR. JAMES JOHNSON: -- to the testimony
16 by Counsel, Your Honor.

17 THE COURT: What about the lengthy
18 question and -- in terms of the title of the
19 document, so I sustain the objection.

20 MR. WILNER: I will, Your Honor, just say
21 it wasn't about the title anymore. We're trying to
22 establish what it is.

23 Q. BY MR. WILNER: You know what the 1989
24 Surgeon General report is all about, don't you?

25 A. In a general sense, yes.

05979

1 Q. Okay. Are you saying that you are
2 unfamiliar with the 1989 Surgeon General report?

3 A. No. I'm not saying that at all.

4 Q. Okay.

5 A. I've read -- I've read portions of many
6 Surgeon General's reports. I'm not sure that I've
7 read an entire one completely all the way through.

8 Q. Okay.

9 A. Because many of the subjects that are in
10 here are biology and epidemiology which are areas
11 that I don't understand.

12 Q. You don't understand biology and
13 epidemiology?

14 A. I'm not an expert in the areas. I'm a
15 chemist.

16 Q. Well, we'll get to that in a minute.

17 Would you turn to the first -- the
18 transmittal letter from the secretary of health and
19 human services, Otis R. Bowen, dated December
20 28th -- 29th, 1988, the first part of the book?

21 A. I see it.

22 Q. And does it say, "It's my pleasure to
23 transmit to Congress the 1989 Surgeon General's
24 report on the health consequences"?

25 THE COURT: Just a minute, please.

05980

1 MR. JAMES JOHNSON: Your Honor, I object
2 to reading from documents which are not in
3 evidence.

4 THE COURT: I agree. I sustain it. If
5 you want to read what it is and what they're saying
6 in the introduction, then I think it needs to be in
7 evidence.

8 MR. WILNER: We're putting in a
9 foundation, Your Honor.

10 THE COURT: Well, I think that's too much

11 information before we get to foundation.
12 MR. WILNER: But this is a foundation,
13 Your Honor. It's mandated by Section 8(a) of the
14 public --
15 THE COURT: He has it to read. You don't
16 have to read it. He's got the document in front of
17 him. You're just asking the foundation questions.
18 MR. WILNER: All right.
19 Q. BY MR. WILNER: Dr. Townsend, do you see
20 where this document was transmitted to Congress and
21 mandated by Section 8(a) of the Public Health
22 Cigarette Smoking Act of 1969?
23 A. I see where it refers to that.
24 MR. WILNER: Okay. And we offer it,
25 public records and reports. And, furthermore,

05981

1 furthermore, we state that since they used the
2 Surgeon General's report constantly in their direct
3 testimony they've waived any objection they
4 possibly could have.
5 THE COURT: All right. I understand
6 that. There's no need to argue it.
7 MR. JAMES JOHNSON: Your Honor, I object
8 to the characterization that we constantly used the
9 Surgeon General's report.
10 THE COURT: Why don't you approach the
11 bench.
12 MR. JAMES JOHNSON: And that we --
13 THE COURT: Approach the bench.
14 MR. JAMES JOHNSON: I'm sorry,
15 Your Honor. I didn't hear you.
16 (Whereupon, the following discussion took
17 place at the bench.)
18 THE COURT: I don't see why he can't
19 introduce the Surgeon General's report. What's the
20 objection to it?
21 MR. JAMES JOHNSON: Your Honor, he can't
22 introduce the letter that goes in front of that
23 report because that is not a --
24 MR. WILNER: I don't care about the
25 letter.

05982

1 THE COURT: All right. Well, he says
2 he's not trying to --
3 MR. WILNER: That was just a
4 foundation --
5 THE COURT: Just a minute, please, sir.
6 MR. WILNER: Sorry.
7 THE COURT: So then you -- So he wants to
8 introduce the report but not the letter.
9 MR. JAMES JOHNSON: I don't think that
10 the entire -- it's appropriate to just dump into
11 the record the entire Surgeon General's report. We
12 use --
13 MR. WILNER: I'm not trying to --
14 THE COURT: Just a minute.
15 MR. WILNER: I'm not trying to.
16 THE COURT: Let Mr. Johnson --
17 MR. WILNER: I'm sorry, sir.
18 THE COURT: Just a minute.
19 MR. JAMES JOHNSON: We did use selective
20 portions from some Surgeon Generals' reports. But
21 we certainly didn't try to dump into the record the

22 entire Surgeon General's report.
23 THE COURT: All right. Let me hear from
24 Mr. Wilner.
25 MR. WILNER: I'm not trying to do that.

05983

1 I've got to start somewhere. When I started to
2 read, he said it wasn't in evidence. So I'm not
3 trying the whole thing.
4 THE COURT: All right. Do you know what
5 particular portions you want to introduce?
6 MR. WILNER: Well, it depends on what he
7 says, but I've got 10 or 12 --
8 THE COURT: There's no sense in going
9 through this game. Maybe he's going to agree. I
10 mean, let's just find out what you want to
11 introduce, and maybe we can revolve it here.
12 MR. WILNER: All right. I don't want to
13 be bound by stating it in advance. I want to start
14 with one and see how I go.
15 THE COURT: But that's where we started
16 out. You said you were going to introduce the
17 whole report.
18 MR. WILNER: No. No. But I've got the
19 page. He wants to know the page.
20 THE COURT: Well, he wants to know
21 specifically what you want to introduce into
22 evidence. That's right. It's not the report. And
23 presumably it's some part of the report. If it's a
24 part of the report, what part?
25 MR. WILNER: Let me get it.

05984

1 I can't swear that that's everything, but
2 that's what I would start with.
3 MR. JAMES JOHNSON: Your Honor, the only
4 portions that I have an objection to are the tables
5 which appear, Tables 4, 5 and 6. This is a lung
6 cancer case. These are lung cancer cases. And
7 these are relative risks for a whole lot of other
8 diseases but not lung cancer.
9 THE COURT: Let me just look at it.
10 MR. JAMES JOHNSON: Yes, sir.
11 THE COURT: Let me see the whole
12 document.
13 MR. JAMES JOHNSON: Yes, sir.
14 THE COURT: Well, the witness has
15 testified with regard to lung cancer and other
16 diseases, so I overrule that part of the
17 objection.
18 Let's make sure that the reporter gets
19 that to mark.
20 MR. WILNER: I don't know if this is the
21 best copy I have.
22 MR. SMITH: This one's highlighted. I
23 don't know if we should mark a highlighted one.
24 MR. WILNER: I'll mark this. That's
25 fine.

05985

1 THE COURT: So we need a clean copy of
2 that to go into the record.
3 MR. WILNER: All right. I'll have a
4 clean copy substituted because there is some
5 highlighting.
6 THE COURT: Thank you.

7 (Whereupon, the bench conference is
8 concluded.)
9 Q. BY MR. WILNER: Before we ask you or I
10 ask you some questions about that 1989 report that
11 you have in your hand, would you say -- I just want
12 to ask you some more about this question of design
13 and what you happen to know.
14 If you were designing a brake for a car,
15 would you have to know how well that brake had been
16 performing, how well the previous design had been
17 performing out in the real world before you start
18 designing a new one?
19 A. I think --
20 Q. Sir?
21 A. Well --
22 Q. Did you hear me?
23 A. I understand your question, I think. And
24 I think to the degree that we need to know what
25 constituents are in the cigarette smoke so we can
05986

1 know what the targets are to reduce to is a direct
2 analogy.
3 If you're asking do I have to know what
4 the magnitude of the risks are, I don't believe so
5 to do my job. And we've conducted our jobs very
6 effectively being chemists because we assume it's a
7 strong risk. And then we look at the theories.
8 But if you're making the analogy of a
9 brake, where the brake's performance is now versus
10 the new brake's performance, that to me is strictly
11 analogous to chemistry levels or biological assay
12 levels for the old product versus the new product.
13 Q. Well, the only -- What I picked up out of
14 that is you think you've done your job very
15 effectively?
16 A. There's no doubt in my mind we've done
17 our job very effectively. We've addressed the
18 smoking and health issues directly. We've put a
19 variety of products -- a broad range of products on
20 the market to directly address those health issues,
21 the tar and nicotine levels are dramatically down
22 from 68 percent where they used to be. Yes, I
23 believe we've been very successful.

24 Q. All right.
25 A. Do I think there's additional progress
05987

1 that needs to be made? Absolutely. And that's
2 what we're doing.
3 Q. All right. Let's look at page 48. See
4 if you still think so. Turn to page 48, please.
5 A. Okay. I'm there.
6 Q. Okay. And let me show it so I can ask
7 you about it.
8 All right. Now, what I've got in front
9 of me on page 48 of the 1989 Surgeon General report
10 is something called age-adjusted cancer death rates
11 for selected sites, males, United States, 1930 to
12 86. Do you see that?
13 A. Yes.
14 Q. Are you familiar with this chart?
15 A. I've seen something similar to this
16 before, not exactly this chart.
17 MR. WILNER: Okay. Well, since it's a

18 little bit hard to read here, I'm going to do my
19 best.
20 Jenny, would you slide it up a little for
21 just a second?
22 Q. BY MR. WILNER: All right. Now, on the
23 bottom of this chart there is a year scale from
24 1930, 1940, 1950, 1960, 70, 80 and 90. Do you see
25 that?

05988

1 A. Yes.
2 Q. And then below that are some
3 different -- is like a legend. And a
4 legend -- what I mean is they use one kind of line
5 for different kinds of cancer. And, like,
6 esophagus cancer, that's a dash, dot, dot, dot,
7 dash, dot. And, like, lung, that's a solid line.
8 And, like, pancreas, that's a bunch of little tiny
9 dots. Prostate cancer, well, that's a dash and
10 then a long dash and a short dash. Bladder cancer
11 and -- Well, I won't go through all of them right
12 this second because I'm going to point them out.

13 Do you see that?

14 A. I see that chart.

15 Q. All right. So, now, let's see if we can
16 agree on what's here. If we look at this little
17 line here which is kind of dropping, that to
18 me -- correct me if I'm wrong -- looks like cancer
19 of the pancreas, little dots. Right? Up, up, up,
20 up, down. And actually we have four or five of
21 them that are very similar and have not gone up or
22 down very much. And they look like
23 pancreas -- pancreas, bladder, dash, dot;
24 esophagus, dash, dash, dash; liver and maybe
25 leukemia. Do you agree?

05989

1 A. I didn't follow every one of those, but I
2 think in general there are some that appear to be a
3 flat, and there are some that appear to be going
4 down a little bit.

5 Q. Then we have one here -- and slide
6 it -- like is dropping. Slide it up a little.
7 Zoom way down. From 1930 to 1990 it went way down,
8 and I believe that to be stomach cancer. Do you
9 agree?

10 A. Yes.

11 Q. And now we've got two of them that are
12 kind of in the middle here. They started
13 out -- They went up a little, and then they've
14 been -- Then they've been flat since then. And I
15 make those two out to be prostate, the bottom one,
16 and the top one colon.

17 A. It is a bladder.

18 Q. Well, colon is a lot more common than
19 bladder, right?

20 A. I'm just looking at the shape of the
21 lines.

22 Q. Well, I don't mean to quibble because
23 either one will be okay. So do you agree with me
24 it's either colon or bladder?

25 A. I think that's reasonable.

05990

1 Q. And that this one, the bottom one here,
2 is prostate, and this is stomach?

3 A. I agree with that.
4 Q. I'm not trying to belabor that, and
5 that's the way the legend was, and I didn't want to
6 do anything too fast.
7 Okay. Now, lung cancer is also on this
8 graph, isn't it?
9 A. Yes.
10 MR. WILNER: Jenny, would you slide it
11 down so we can see what happened to lung cancer?
12 I'm sorry. Move it back up for a second.
13 Q. BY MR. WILNER: Lung cancer started off
14 in 1930 to be, like, third from the bottom per
15 100,000. Now, this is not -- This is not just a
16 reflection of the number of people in the country.
17 This is per 100,000, correct?
18 A. It says, "Age-adjusted cancer death
19 rates."
20 Q. And it says "rate per 100,000" on the
21 top, doesn't it?
22 A. "Rate per 100,000, male population."
23 Q. Okay. So lung cancer started way down
24 here, way down there where there was hardly any in
25 1930, right?

05991

1 A. In 1930 the number is lower than other
2 years.
3 Q. Well, is that the best you can do with
4 that? It was lower? There was hardly any.
5 A. Now, this is not my area. I can read off
6 this graph very well, thank you.
7 Q. Okay.
8 A. And what it says is I would estimate in
9 1930 to be five.
10 Q. Okay.
11 A. The number five.
12 Q. And then we go up to about 19 --
13 A. My eyes are giving up.
14 Q. About 1955 it's passing. Like a freight
15 train, it's passing everybody else. Do you see it?
16 A. In 1955 it appears to have passed the
17 other curves.
18 Q. And this is when the cigarette industry
19 was getting together with Hill and Knowlton and
20 reassuring smokers that it was okay to smoke, true?
21 MR. JAMES JOHNSON: Objection,
22 Your Honor.
23 THE COURT: All right. Sustained.
24 Q. BY MR. WILNER: In 1955 it was passing
25 other cancers. And then what happened to the lung

05992

1 cancer rate? Did it continue to go up through
2 19 -- from 1950 to 1960?
3 A. This chart shows the age-adjusted cancer
4 death rate for selected sites for males, lung
5 cancer continuing up.
6 Q. And from 1960 to -- 1960 to 1970 steeply,
7 right?
8 A. This shows it still going up.
9 Q. Still going up.
10 Now, have you in your meetings at
11 R.J. Reynolds when these scientists get together,
12 do you put that on the wall?
13 A. We have experts who understand these

14 types of data very well because they live and
15 breathe it every day. In product development and
16 cigarette design, if you're suggesting we look at
17 that all the time, the answer is no.

18 Q. Well, so you have people who you can call
19 and ask them about this?

20 A. Sure.

21 Q. Well, are you gonna when you get down and
22 back to -- Where is the R.J. Reynolds plant? It's
23 called Tobaccoville, isn't it?

24 THE COURT: All right. Objection
25 sustained. This has nothing to do with the issues

05993

1 in this lawsuit.

2 MR. WILNER: All right.

3 Q. BY MR. WILNER: So, Dr. Townsend,
4 Reynolds, your company, makes, what, about
5 one-quarter of the cigarettes consumed in the
6 United States?

7 A. Between -- Yeah. About a quarter.

8 Q. How much of the -- How many of these
9 deaths does Reynolds take responsibility for?

10 A. I don't know. I'm not a statistician.
11 I'm not an epidemiologist. This is way outside of
12 my field.

13 Q. All right, sir. Let's look at women just
14 briefly. Page 47. What's been the experience with
15 women and lung cancer?

16 A. The solid line in this table goes up
17 slowly up to about 1960 and then goes up more
18 steeply from 1960 to 1985.

19 Q. Where the data ends in this particular
20 series, right?

21 A. Well, this table ends -- apparently ends
22 there, sure.

23 Q. And did lung cancer surpass breast cancer
24 as the number one cause of cancer death in females
25 in or about 1984?

05994

1 A. It appears to become equivalent from this
2 table.

3 Q. And since 1984 has it passed?

4 A. I don't know. This table ends at 1984.

5 Q. But you have access to information, I
6 thought, beyond this?

7 A. We have experts at R.J. Reynolds. I made
8 that very clear.

9 Q. Were the people -- the women who died and
10 became part of this graph smoking the products that
11 you've been talking about that you reduced the tar
12 in?

13 A. I don't know. Nowhere on this chart do I
14 see that this is a chart of smokers only. This is
15 age-adjusted cancer death rates per females.
16 Nowhere do I see that it's broken out to be smokers
17 only.

18 Q. So you'll wait until the next chart.
19 Okay. That's fine.

20 A. I don't think that's fair at all.

21 Q. All right. Well, we'll look at the
22 smokers versus the nonsmokers. Let's look at
23 page 49.

24 A. Okay.

25 Q. The bottom one. Let's start with the
05995
1 bottom one. Okay. Is this the age standardized
2 death rates per 100,000 women?
3 A. You read that right.
4 Q. Yeah. And, now, this is just like the
5 other chart, only it's what you asked. It's a
6 breakdown between smokers and nonsmokers, right?
7 A. It appears to be, yes.
8 MR. WILNER: Your Honor, do you want me
9 to wait or go ahead?
10 THE COURT: I apologize, Mr. Wilner.
11 MR. WILNER: No problem at all. Happy to
12 wait. No problem.
13 THE COURT: Go ahead.
14 MR. WILNER: Thank you, Your Honor.
15 Q. BY MR. WILNER: Okay. Well, now, have
16 you seen this chart?
17 A. I've seen a chart similar to this. I
18 haven't seen this exact one.
19 Q. All right. In 1960 to 64, here was the
20 lung cancer rate among women smokers, and here was
21 the lung cancer rate among nonsmokers, right?
22 A. Right.
23 Q. By 1965-68 the lung cancer rate among
24 smokers had grown. The lung cancer rate among
25 nonsmokers, not at all or immeasurable, between
05996
1 11.7 and 12.4. This one goes up from 23.9 to 36.5,
2 right?
3 A. That's what it appears to do.
4 Q. All right. And then 1969 to 72 the
5 smoking cancer rate is up to 54, but the nonsmoker
6 rate is still 12.2, true?
7 A. That's what this chart suggests,
8 certainly.
9 Q. And then look what happens in 1982 to
10 86. Would that be a time, sir, where people will
11 have -- where women would have been using filtered
12 cigarettes manufactured by your company and, as you
13 put it, your competitors?
14 A. Are you asking would women smokers be
15 smoking filtered cigarettes --
16 Q. Sure.
17 A. -- in 1982 to 1986?
18 Q. Sure.
19 A. I would say predominantly, yes.
20 Q. And, as you put it, the cigarettes with
21 less tar -- are these people who are dying of
22 cancer in this year also smoking those cigarettes?
23 A. In the year range between 82 to 86, I
24 would say in general the sales-weighted tar yield
25 average is lower than for that period of 69 to 72.
05997
1 Q. So your tar is going down, and the deaths
2 are mounting; is that a fair statement?
3 A. If these -- If the data in this table are
4 accurate, then this would suggest that the lung
5 cancer rate is going up among smoking women. We've
6 already talked about the tar going down, which I
7 think points exactly to why this is such a complex
8 issue.
9 Q. Well, let me direct your attention to the

10 very top of the page and the sentence which says,
11 "These data also dramatically illustrate the
12 current lung cancer epidemic in women is confined
13 to those who smoke cigarettes." Now, do you agree
14 with that?

15 A. I don't know. I'm not an expert in this
16 area. I really don't know.

17 Q. Well, would it make a difference to you
18 if it were true in terms of what you're selling to
19 these women?

20 A. What makes a difference to me is reducing
21 the risks of smoking, and we've taken the theories
22 that the public health community has advanced and
23 pursued those and actually implemented those in the
24 marketplace. Does a chart like this help me do my
25 job? No, because cigarette smoking is a strong

05998

1 risk, and I know that. That's my job, is to reduce
2 those risks.

3 Q. Well, I'll ask you whether you generate
4 these theories or the public health community in a
5 minute.

6 But what I'm asking is this: If you
7 found -- Now, you said if the data are valid. You
8 made that kind of qualification just a minute ago,
9 didn't you?

10 A. I said something like that, yes.

11 Q. So you're not sure if it's valid or not?

12 A. Again, this is not my area. I can't
13 critique. I don't know whether this is right or
14 not. I see what you see in terms of the trends
15 here in these charts. I don't understand what's
16 behind these data because I haven't gone in, tried
17 to understand the statistics and the way those
18 statistical studies are done, the particular
19 populations that were examined. I mean, I'm
20 looking at it just as you are here. That's all.

21 Q. Well, let me ask you, is there any report
22 that can come -- Remember I asked you about the
23 brakes, you know, whether it would be good to see
24 whether the design that you were working on has had
25 a lot of accidents. Is there any report from the

05999

1 real world in terms of human beings dying that
2 makes a difference to you in your plans for
3 designing a cigarette?

4 THE COURT: Just a minute, please.

5 MR. JAMES JOHNSON: Your Honor, this is
6 cumulative. The same line of questions has been
7 going on now for several minutes.

8 THE COURT: Overruled.

9 THE WITNESS: I'm sorry. Can you ask the
10 question again?

11 MR. WILNER: Yeah. I mean, Dr. Townsend,
12 maybe I'm wrong, but you --

13 THE COURT: Just ask the question.

14 MR. WILNER: I'm sorry, Your Honor.

15 Q. BY MR. WILNER: Let me think exactly what
16 I want to ask.

17 Dr. Townsend, then is there no data like
18 this that would concern you as a cigarette
19 designer?

20 A. I'm not sure I understand. If you're

21 suggesting that these kind of data are unimportant
22 to me as a human being, of course they are. You've
23 been talking about what I need to do my job. And
24 I've already told you what I need to do my job and
25 the way we go about -- and my scientists that work

06000

1 in my group in research and development need to go
2 about their job, and what we need is the tools, the
3 scientific tools, we need the support from our
4 company and all of that and the assumption that
5 cigarette smoking is a risk, and we believe that.

6 THE COURT: Let's go ahead, Sheriff, and
7 take a ten-minute break.

8 (Whereupon, the jurors were excused from
9 the courtroom.)

10 (Whereupon, a 25-minute recess was taken
11 at 3:20 p.m.)

12 (Whereupon,
13 Exhibit Number 264 was marked
13 for identification.)

14 (Out of the presence of the jury.)

15 THE COURT: Lawyers, are you ready for
16 the jury?

17 MR. JAMES JOHNSON: Yes, Your Honor.

18 MR. WILNER: Yes, Your Honor.

19 MR. SMITH: Your Honor, I'm sorry. One
20 very brief matter. Earlier in the trial the Court
21 made it clear that exhibits should be tendered one
22 at a time and not in notebooks, and that notebooks
23 with statements on them like "fraudulent public
24 statements" should not be displayed in a way that
25 the jury could see them.

06001

1 I note that indeed Mr. Wilner handed the
2 witness, not a single document, but a notebook. On
3 the cover it says "Fraudulent Public Statements of
4 the Tobacco Companies," and I believe that that
5 would be inconsistent with the Court's direction on
6 how evidence was to be handled.

7 THE COURT: Let me see the --

8 MR. SMITH: It's right there. So far one
9 page has been marked or at least a page or two.

10 MR. WILNER: We don't care if the cover
11 is scratched off. I don't care.

12 THE COURT: Well, I think that's only one
13 of the questions. And obviously you can black that
14 out, and I would ask that you do.

15 And then I think the next part of
16 Mr. Smith's concern is that you find this
17 particular one -- And I think that's a fair
18 request, rather than just give the witness a
19 voluminous set of documents and expect him to find
20 it. I know that they did that somewhat in their
21 direct examination. But there was -- I mean, in
22 terms of, I guess, the different tabs there that
23 they referred the witness to. But I presume that
24 all of those were exhibits. I don't know if --

25 MR. JAMES JOHNSON: All of those were

06002

1 exhibits, Your Honor, admitted into evidence.

2 THE COURT: Yeah. So, Mr. Wilner, if we
3 need to break or reserve on this and give you
4 overnight to pick out the ones specifically that

5 you want to present to the witness one at a
6 time -- Yes, sir?
7 MR. WILNER: I don't know in advance,
8 Your Honor. So if Counsel requires me, we'll have
9 to break each one and go through that procedure.
10 But I do not know in advance when I cross-examine
11 the --
12 THE COURT: Well, I think you can
13 simplify it simply by examining it and handing it
14 to Mr. Johnson or your assistant and then
15 letting -- tell them what tab number and just let
16 them hand you what tab number. I don't see it
17 being that complicated, what he's asking.
18 I'm kind of old-fashioned too. I always
19 use formal titles to lawyers and even machine
20 operators during the proceedings, so that would
21 include the nice lady in the back, back there.
22 MR. WILNER: Thank you, Your Honor.
23 THE COURT: Can we go ahead and mark that
24 cover heading off the front?
25 MR. CURTIS JOHNSON: I assume if we're

06003

1 just going to pull it out, there's no need to --
2 THE COURT: Well, he's concerned, I
3 guess, that --
4 MR. CURTIS JOHNSON: We're not going to
5 display it. I mean --
6 MR. HARDY: Well, actually, as long as
7 this has come up, I specifically asked during the
8 testimony of Dr. Pollay to have those kinds of
9 covers blacked out, and I thought the Court had
10 ordered it.
11 THE COURT: I did.
12 MR. HARDY: We had a discussion about it.
13 THE COURT: Why don't you just take a
14 marker and mark out the title there, and we'll just
15 move on. It's no big deal.
16 All right. You all ready for the jury?
17 MR. JAMES JOHNSON: Yes, Your Honor.
18 MR. SMITH: Yes.
19 (Whereupon, the jury was seated in the
20 jury box.)
21 THE COURT: Thank you, ladies and
22 gentlemen.
23 Mr. Wilner, you may continue.
24 MR. WILNER: Thank you, Your Honor.
25 Q. BY MR. WILNER: Dr. Townsend, do you

06004

1 still have the 1989 Surgeon General's report with
2 you up there?
3 A. Yes, I do.
4 Q. Okay. I'll ask you some questions about
5 that in just a minute.
6 You presented in your direct testimony
7 all about a new kind of a cigarette, a mechanical
8 cigarette kind of called a Premier and an Eclipse?
9 A. Well, I didn't call it a mechanical
10 cigarette. I did call it a cigarette that heated
11 tobacco but didn't burn tobacco.
12 Q. And this has all sorts of kind of space
13 shuttle technology in it?
14 A. Well, it has new materials that are
15 present in it, particularly some of the materials

16 that are in the carbon heat source. The glass
17 insulator is a new material. The alumina pellets
18 inside the aluminum capsule is a new material. And
19 we did have to develop new machinery to assemble
20 that in a high-speed manufacturing environment.
21 Like --

22 Q. This is --

23 A. Excuse me. Like, the insertion of the
24 carbon into the capsule required us to work with a
25 company like Bosch who we'd never worked with

06005

1 before to try to develop high-speed equipment.

2 Q. And this was never offered to any of the
3 plaintiffs' decedents in this case, right? They
4 never had a chance to buy this thing?

5 A. Well, I don't know. I did tell you that
6 it was available in three markets, three test
7 markets: St. Louis, Tucson and Phoenix.

8 Q. Beginning when?

9 A. 1988.

10 Q. And ended when?

11 A. The test market concluded in 1989.

12 Q. So one year in those three cities; other
13 than that, no one could use it, right?

14 A. Those were the test markets. Those were
15 the dates. The successor to that is Eclipse, which
16 is in the test market today.

17 Q. Where?

18 A. In Chattanooga; Lincoln, Nebraska; and
19 Atlanta, Georgia.

20 Q. So if you don't live in those cities, you
21 don't get these mechanical or whatever you call
22 them cigarettes?

23 A. These are test markets. My goal is to
24 make sure those test markets are successful, that
25 these are consumer acceptable products and, in

06006

1 fact, to launch them nationally. That's our goal.

2 Q. Now, are you tracking the people who use
3 these things to see whether they get lung cancer?

4 A. I don't know what you mean by tracking to
5 see if they get lung cancer. These are chronic
6 diseases that take a lifetime of exposures and
7 experiences to develop.

8 Q. Well --

9 A. You know, we're offering this to smokers
10 as an alternative to tobacco-burning cigarettes.
11 This is a cleaner cigarette, reduced chemistry,
12 reduced biology.

13 Q. All my question was, you got people who
14 you're going to start selling this thing to
15 evidently, right, in Chattanooga, wherever, or
16 Tucson, wherever. Are you at least writing down
17 their names so that you can tell, you know, in
18 another 20 years whether they're going to get
19 cancer or not and what rate? At least start?

20 A. We keep some records of some smokers in
21 the test market because we go back and ask them
22 specific questions about the product and what their
23 likes and dislikes are. So we do keep records of
24 some of the names of people in the test market.

25 If you're suggesting in your question are

06007

1 we doing a prospective epidemiology study to see if
2 these smokers, in fact, get less lung cancer, the
3 answer is no.

4 Q. Why not?

5 A. Because -- Well, I don't know. We've
6 developed a cigarette that has reduced chemistry,
7 reduced biology. There's every reason to think
8 that's a step in the right direction. You know,
9 I'm not aware that my company has considered doing
10 a prospective epidemiological study.

11 Q. Have you ever heard the saying, "The
12 proof of the pudding is in the eating"? Do you
13 know what that means?

14 A. Well, I've heard a phrase similar to
15 that. But I've never heard it exactly as you
16 articulated it.

17 Q. So the proof of whether this is safe is
18 going to come when? 20 years down the line, if you
19 ever sell it?

20 A. See, that's exactly part of the problem.
21 There's no way to prove that one cigarette is safer
22 than another. Toxicology suggests certainly that
23 less ought to be better. And that's the approach
24 we've taken in all of our cigarette development
25 work, our cigarette design work. Less ought to be

06008

1 better.

2 Q. Well, I'll ask you about the toxicology
3 in a minute. But, first, I want to ask you as to
4 the other, the regular cigarettes, the
5 nonmechanical variety, the burning variety, your
6 company has sold Winstons, Salems, various other
7 brands for the last 50 years and made money on
8 them, right?

9 A. That's correct.

10 Q. In fact, while I'm at it, you said that
11 it cost 800 million dollars to make a Premier?

12 A. Approximately 800 million dollars we
13 spent on the entire development and manufacturing
14 scaleup.

15 Q. Right. For how many years?

16 A. We started the Premier development in
17 about 1981, thereabouts. We -- The test market
18 began in 1988. It was a tremendous effort,
19 tremendous scientific challenge.

20 Q. All right. I'm just trying to get how
21 many years this hundreds of millions of dollars got
22 spent. From 81 to 88? Or from 81 to some other
23 year?

24 A. I said 81. And the test market started
25 in 1988. We concluded the market in 89. So that

06009

1 was the termination of the Premier project, 89.

2 Q. Eight years then, right?

3 A. Okay.

4 Q. But if you count 81 and 89, that could
5 have been nine years. So eight or nine years you
6 spent eight or nine hundred million, right?

7 A. Okay. That's fair.

8 Q. Okay. So in order to put that in
9 prospective in terms of how much that represented
10 to the company, how much did Reynolds spend on
11 marketing and cigarettes during that time?

12 A. I don't know. I haven't gone back and
13 added that up.
14 Q. Well, you have some idea of what Reynolds
15 spends to market, don't you?
16 A. Well, I think it varies considerably from
17 year to year. I've seen numbers.
18 Q. You've seen numbers. Okay. In general
19 the cigarette industry spent in the last few years
20 about 6 billion dollars a year to market, right?
21 A. Over what time period are you talking?
22 Q. In a year.
23 A. In one year?
24 Q. Yeah.
25 A. Okay. I don't know that for sure.

06010

1 Q. Well, Reynolds is, what, a quarter of the
2 industry, roughly?
3 A. We have a volume of approximately a
4 quarter of the U.S. market.
5 Q. So that would be -- If it were divided
6 equally, it would be a billion and a quarter
7 roughly Reynolds spends to market per year, right?
8 A. I think that's just an approximation. I
9 think that's an overapproximation, frankly.
10 Q. What do you think it is, just a billion?
11 A. Again, I think it varies from year to
12 year. I think a billion and a quarter sounds high
13 to me based on what I've seen.
14 Q. Well, a billion is a thousand million,
15 right?
16 A. That's right.
17 Q. So even if it's just a billion over eight
18 years, that would be 8 billion dollars just from
19 Reynolds just to promote sales, right?
20 A. If the marketing expense -- If the
21 marketing expense were a billion a year, over
22 8 billion is -- my calculation would be 8 billion,
23 if that were true.
24 Q. Now, the one question that I suggest you
25 might ask if you were a prospective -- if you were

06011

1 designing cigarettes, is -- and we're back to what
2 it takes to design a cigarette -- is how many
3 people -- and I asked you this before, but I never
4 got further into it -- how many people who
5 buy -- Well, first, before I ask this, although you
6 talked about Premier, you design and sell Winstons
7 and other brands, right?
8 A. We develop and design and sell Winston
9 cigarettes, among other brands.
10 Q. Do you take responsibility for the
11 Winstons?
12 A. What do you mean "responsibility"?
13 Q. Well, I mean, do you take -- does the
14 company stand behind the Winston brand?
15 A. I'm not sure I understand what you mean
16 "stand behind." Are we doing everything we can to
17 ensure quality in the cigarettes, to ensure
18 consistent smoking? What are you talking about?
19 Q. Well, let me ask you this way: Have you
20 done everything you could to protect the health of
21 the people who buy Winston?
22 A. What we've done --

23 Q. Wait. Before you tell me, could you
24 answer that yes or no?
25 A. I'm sorry. Can you repeat the question?

06012

1 Q. Have you done everything you could to
2 protect the health of the people who buy Winston?
3 A. We've done everything we could and can do
4 to reduce the risks of smoking in consumer
5 acceptable products. We're continuing to try to
6 push the frontiers back on alternate cigarettes.
7 We're trying to make very low tar, ultra low-tar
8 products more acceptable to the consumer because
9 those products have limited consumer acceptance.
10 We're trying alternate designs like the Premier,
11 Eclipse.

12 One of our competitors has just come out
13 with in the test market with a battery-powered
14 cigarette that doesn't burn but heats the cigarette
15 through --

16 Q. All right. I'll get into that. But
17 let's try and confine the answer to the question.

18 A. Mr. Wilner, I'm trying to answer your
19 question. You asked me are we doing everything we
20 can do to protect the health of our smokers.

21 Q. Winstons. Winstons. Not a
22 battery-powered cigarette, a Winston.

23 A. I'm telling you in our product
24 development, be it conventional -- and I talked
25 about that and proving the consumer acceptance of

06013

1 ultra low-tar products -- or be it in new designs,
2 we're doing everything we know how to do. And
3 we're making successes.

4 Q. Okay. Let's see if you're making
5 successes.

6 MR. JAMES JOHNSON: Objection,
7 Your Honor, to the comments and statements by
8 Counsel. Could we just have questions?

9 THE COURT: Sustained.

10 Q. BY MR. WILNER: How many people who
11 bought and smoked cigarettes in the last 40 years
12 died prematurely as a result of diseases from the
13 cigarette?

14 A. I don't know. I'm not an
15 epidemiologist. I don't understand.

16 Q. Okay. Well, let's, please, get out the
17 Surgeon General report, and turn to page 148.

18 Now, remember you testified earlier that
19 you have to know a little bit about the history to
20 know about what you're doing now. Remember that?

21 A. Yes. I testified that as a scientist you
22 have to go back and understand what other
23 scientists have done in your area to understand
24 what kinds of experiments they've conducted, to
25 learn from their mistakes, also to generate new

06014

1 ideas for directions to take.

2 Q. Okay. So let's take a look at page 148.
3 It says: "Estimated risks, relative risks for
4 current and former smokers of cigarettes, males
5 aged 35 years or more, 6-year, from 1959 to 65,
6 followup of American Cancer Society 25-state study,
7 CPS-I." Do you see that?

8 A. Yes. I see that.
9 Q. And you're familiar with a CPS-I?
10 A. I've seen bits and pieces of CPS-I. I've
11 seen summaries. I'm not an epidemiologist. And I
12 certainly didn't understand most of it.
13 Q. Let's see this. It says, "Underlying
14 cause of death: All causes." Current smokers,
15 gives a relative risk of 1.80 with an
16 interval -- confidence interval of 1.75 to 1.85.
17 And then for former smokers it's 1.38 with a
18 confidence interval of 1.33 to 1.40. Do you see
19 that?

20 A. Yes.

21 Q. And this is from 1959 to 1965 when this
22 study was done, right?

23 A. Yes.

24 Q. Okay. Now, when you say a relative risk
25 of 1.80, does that mean that for every 100 people
06015

1 who were not current smokers or former smokers who
2 died, 180 died in the same period who were current
3 smokers?

4 A. That's my interpretation of risk factor.
5 I'm not an epidemiologist. But that's my
6 interpretation.

7 Q. Okay. So if you had a hundred
8 people -- If you had a hundred people who were
9 not -- who were never smokers, and you -- or you
10 just started counting deaths, by the time you got
11 to 100 people who have died in the room of the
12 smokers, 180 would have died, and you agree?

13 A. I think that's consistent with my
14 interpretation of risk factor being 1.8.

15 Q. Okay. Now, let's go down and see some of
16 these other risk factors for cigarette. CHD, do
17 you know what that is?

18 A. Chronic heart disease.

19 Q. Yeah. Coronary heart disease. And that
20 is also elevated right up to 2.25 for ages 35 to
21 64, correct?

22 A. Well, it shows 1.83 for ages greater than
23 35. Then it breaks it out. Page 35 to 64, the
24 risk factor is 2.25. And per the age greater than
25 65, it's 1.39.

06016

1 Q. And another way of saying that would be
2 225 percent risk, right?

3 A. Well, again, that would be my
4 interpretation.

5 Q. Okay. And we go down to aortic aneurysm,
6 4.11. Do you see that? 411 percent for aortic
7 aneurysm?

8 A. Well, what this says is risk factor is
9 4.11.

10 Q. Okay. And then we come down to
11 bronchitis and emphysema, 8.81, 881 percent. Do
12 you see that?

13 A. The risk factor for bronchitis and
14 emphysema it says is 8.81 from the study.

15 Q. And cancer of the lung, 11.35 or
16 1,135 percent? Do you see that?

17 A. What it says is cancer of the lung, the
18 risk factor of 11.35.

19 Q. Okay. Now, and these are for males from
20 the CPS-I study, right?
21 A. (No oral response.)
22 Q. Now, have you gone back and looked to see
23 what happened in the United States between the
24 first study, 1959 to 65, and the second study,
25 which was 1982 to 86, to evaluate whether any of
06017

1 the new cigarette designs you were putting on the
2 market were helping things?
3 A. No. Again, I haven't because I'm not an
4 epidemiologist because I don't understand this.
5 Q. Okay.
6 A. I can tell you that the U.S.
7 Surgeon General in 1981 said that there has been a
8 significant reduction in lung cancer as a result of
9 the lower tar cigarettes.

10 Q. Well, let --
11 A. He went on to say --
12 Q. Well, I'll ask you all about that.
13 A. Okay.
14 Q. But let's see if we can move this along.
15 A. I'm trying to answer your question
16 accurately. I hope you understand.
17 Q. You're quoting the 81, and this is the
18 89, right?

19 A. Yes.
20 Q. Okay. So you're quoting the 81. Have
21 you gone back to look at the 89 to see what's
22 happened in the interim?
23 MR. JAMES JOHNSON: Objection; asked and
24 answered already.
25 MR. WILNER: Your Honor, I'll withdraw
06018

1 it. I just want to move along.
2 Q. BY MR. WILNER: All right. Let's look at
3 page 150. Now, this is the same thing, estimated
4 relative risks for current and former smokers of
5 cigarettes, CPS-II, 1982 to 1986. Do you see
6 that? Look up at the top.

7 A. I see it's a four-year study over that
8 period, 82 to 86, as I understand it.
9 Q. So this study could not have been
10 available to the 1981 Surgeon General, right?
11 A. Makes sense to me.
12 Q. Okay. So let's take a look and see
13 what's happened between the CPS-I and CPS-II. Now,
14 according to you things should be getting better,
15 right, not worse?

16 A. I think that's a mischaracterization of
17 what I said. What I told you was what I read in
18 the 81 Surgeon General report.
19 Q. And you haven't gone back to read what's
20 come since?

21 A. I'm telling you I'm not an
22 epidemiologist.
23 MR. WILNER: All right. So let's go to
24 all cause mortality.
25 And, Ms. Stieger, could you blow that up,
06019

1 please.
2 Q. BY MR. WILNER: All cause mortality in
3 the CPS-II study is now up to 2.34, 234 percent.

4 Do you see that?
5 A. It says the risk ratio of 2.34 for all
6 causes.
7 Q. And the former one in CPS-I was 1.80?
8 A. The risk ratio in CPS-I was 1.8.
9 Q. So it's gotten worse?
10 A. That would be my interpretation.
11 Q. All right. Now, let's look at cancer of
12 the lung. Back in 1959 to 65 it was 11.35 or 1,100
13 percent. Still quite a bit. Would you agree?
14 Quite a serious risk?
15 A. This table shows a risk ratio of 11.35
16 for CPS-I.
17 Q. And for CPS-II what's it up to?
18 A. For CPS-II it says 22.36.
19 Q. It's almost doubled; is that right?
20 A. The risk ratio is about double.
21 Q. Why?
22 A. Why?
23 Q. Yeah.
24 A. You're asking me? I don't know. I'm not
25 an epidemiologist. I'm telling you I don't

06020

1 understand --
2 Q. Yeah.
3 A. -- these kind of data.
4 Q. And do you -- Is it your opinion that
5 your product has nothing to do with this?
6 A. I never said that.
7 Q. Okay.
8 A. What I've said -- I think I made very
9 clear cigarette smoking may cause or may contribute
10 to other factors that cause lung cancer.
11 Q. Now, based on the -- Let's go back to the
12 all cause mortality at the top. Thank you.
13 2.34, a relative risk. Now, I want to
14 ask you a little bit about that. What does that
15 mean in terms of the number of people who will die
16 prematurely using this product? How do you
17 interpret "a relative risk" of 234 percent?
18 A. I'm not an epidemiologist. I'm not sure
19 how to interpret that accurately. These were risk
20 ratios. I don't understand how to use risk ratios
21 in an accurate fashion.
22 Q. Well, let's see if we can do it based on
23 what you said before. If we take -- Let me draw on
24 this. What this says -- and correct me if I'm
25 wrong -- is that in the time that we had 100 deaths

06021

1 in never smokers, we had 234 deaths in current
2 smokers. Do you agree with that?
3 MR. JAMES JOHNSON: Your Honor, I'm going
4 to object. He's already stated repeatedly he does
5 not know epidemiology as an expert. This is simply
6 a vehicle for Counsel's own testimony.
7 THE COURT: Well, it sounds to me pretty
8 close to what's been covered, but I'll give him
9 just a little bit more room on that to see where
10 he's going.
11 Q. BY MR. WILNER: Out of 100 deaths in
12 never smokers there are 234 deaths in smokers thus
13 say this 2.34. Isn't that what it means?
14 A. I don't know the accurate interpretation

15 of risk ratios. I've already told you that that
16 would be my superficial interpretation of it.

17 Q. Okay.

18 A. I'm not an epidemiologist.

19 Q. Okay. If we have, then, a room with
20 100 never smokers who have died and 234 current
21 smokers -- Now, the question is, if I buy this
22 product, how likely am I to die from it? And let
23 me see if we can answer this question from this,
24 based on what you've already told us. Out of the
25 234 people who died who were current smokers, if

06022

1 100 of them would have died anyway, then we
2 subtract the hundred from the 234, giving an excess
3 death of 134, true?

4 A. Superficially that sounds like it might
5 be right, but I don't know.

6 Q. Okay.

7 A. I don't know whether you can treat risk
8 ratios of this sort in that manner.

9 Q. Okay.

10 A. You really need to be asking these
11 questions to an epidemiologist.

12 Q. All right. Well, let's see what we get
13 when we treat them in this manner and then compare
14 that to what the literature says.

15 THE COURT: All right. I sustain the
16 objection.

17 Q. BY MR. WILNER: Okay. What I'm asking
18 you, Dr. Townsend, is, is it true that more
19 than -- more than 50 percent, more than half of the
20 people who are regular users of your product will
21 die prematurely from it?

22 A. I don't know. You're asking the wrong
23 witness. I'm not an epidemiologist. I'm not a
24 statistician.

25 Q. Let me ask you this: Is there -- If it

06023

1 were true that 80 percent of the people who bought
2 Winstons died prematurely from them, would you pull
3 them off the market?

4 A. If it were clear that cigarette smoking
5 caused cancer and we knew how it caused cancer, if
6 we knew the mechanism, then we would know how to
7 fix the problem.

8 Part of what we've been doing is chasing
9 the various theories in the scientific community,
10 trying to address each and every one of those.
11 We've also looked at reducing the overall tar and
12 nicotine yields because less ought to be better.

13 If it were shown -- If it were shown as
14 you're suggesting, that that product, Winston,
15 resulted in -- was a direct cause in premature
16 death of 80 percent of the people, then we would
17 know how it does it. We would know why it does
18 it. That's exactly what I would like to know.

19 Q. I guess I didn't ask the question very
20 articulately. I'm sorry, Dr. Townsend. Perhaps I
21 didn't -- I wasn't very clear.

22 My question was, since you don't know how
23 many people, or if you say you don't know what the
24 number of people who've used the product, how many
25 of those will die from it, then let me ask you, as

06024

1 a cigarette designer, if you were told that
2 80 percent of the people who used it would die from
3 it, what would you do? Anything?

4 A. I mean, this is a hypothetical question.
5 And, frankly, I don't know what -- You know, I
6 don't know whether to accept that hypothetical
7 question or not. If it were demonstrated -- Not if
8 I were just told it, but if it were proved that
9 that product was the direct cause of 80 percent of
10 its smokers to die prematurely, again, the thing I
11 would want know is why is that so? and, as a
12 scientist, then to dig through that and fix the
13 problem.

14 Because, you know, some smokers are going
15 to continue to smoke. A lot of smokers are
16 quitting. Some will continue. My job is to reduce
17 the risks of smoking, and I want to know why it's a
18 risk. I want to know how to fix it. That's what
19 we've been trying to do.

20 Q. Do you know what the disease cholera is?

21 A. Well, I've heard of it. I certainly
22 don't know details of it.

23 Q. Do you know who the physician John Snow
24 was?

25 A. No.

06025

1 Q. Do you know that there was an epidemic of
2 cholera in London many years before anyone
3 identified the cholera virus, which is called the
4 *Vibrio cholerae*?

5 A. I'm not aware of that.

6 Q. Have you heard in any of your discussions
7 with your fellow scientists or cigarette designers
8 that this scientist John Snow who worked in London,
9 a doctor, found that the clusters of cholera were
10 coming around a particular clump --

11 THE COURT: Excuse me.

12 MR. JAMES JOHNSON: Your Honor, he's
13 already said he doesn't know John Snow, doesn't
14 know about the epidemic. This is just a device for
15 Counsel to testify.

16 THE COURT: Sustained.

17 Q. BY MR. WILNER: Well, let me ask you this
18 way, then, Dr. Townsend, do you believe -- is it
19 your testimony that you have to know exactly how a
20 disease is caused before you can take preventative
21 measures?

22 A. No. I think that's clearly a
23 misstatement of pretty much everything I've said.
24 It's clear that epidemiology can help scientists in
25 guiding them toward finding out what problems exist

06026

1 and what may be associated with those problems.

2 Epidemiology, I believe, has had its
3 great successes in the short-term illnesses or
4 other public health problems. It's very difficult
5 to translate epidemiology to chronic diseases.

6 My understanding -- But I'm not in any
7 way trying to minimize the power or importance of
8 epidemiology. I think in order to fix problems, by
9 and large, you need to know what's causing the
10 problem, and that's where the mechanism comes in.

11 The fact that we don't know the mechanism of how
12 lung cancer develops, whether it's as a result of
13 smoking or whether it's as a result of high fat
14 diets, we don't understand the mechanisms. But
15 even with the lag of knowing that mechanism, that
16 hasn't prevented us from trying to address those
17 problems through what I think is common sense.
18 Less ought to be better.

19 Q. You're familiar, I think, as you
20 testified before, with how the medical knowledge
21 developed about cigarettes and disease over the
22 years?

23 A. I'm generally familiar with how some of
24 the information has come together. I'm not a
25 biologist. I'm not a medical scientist. I'm not a

06027

1 statistician or epidemiologist. But I have in the
2 course of my cigarette design work gone back and
3 looked at some of the historical theories that have
4 been developed, why they've been developed and some
5 of the things that have been said about those
6 theories and ultimately where they led to.

7 Q. And one of the first studies that was
8 done back in the early 1950s was done by a
9 gentleman named Sir Richard Doll. You've heard
10 that name, right?

11 A. Of course.

12 Q. He instituted -- and his colleagues
13 instituted in England what later became known as
14 the British Physicians Study. Do you remember
15 that?

16 A. I've heard of that, but I don't remember
17 any details about it.

18 Q. And they kept accurate records of the
19 smoking history and the diseases of British
20 physicians and followed that up for at least
21 40 years, right?

22 A. I'm aware that Dr. Doll -- Sir Richard
23 Doll was an epidemiologist. He did many
24 epidemiological studies. If you want to know any
25 of the details about it, again, you're asking the

06028

1 wrong witness. I'm sorry.

2 MR. WILNER: Well, let's see what you do
3 know.

4 I would like to hand this to the witness.
5 THE COURT: All right.

6 MR. JAMES JOHNSON: Let's see it.

7 THE COURT: You may approach the witness,
8 Mr. Wilner.

9 MR. WILNER: Thank you, Your Honor.

10 Q. BY MR. WILNER: Okay. I hand you from an
11 article entitled "Mortality in Relation to Smoking,
12 Four Years Observation on Male British Doctors." I
13 think it's British Medical Journal. BMJ, yes.
14 British Medical Journal, 1994, by Sir Richard Doll
15 and others. Do you recognize this as the
16 culmination of the British Physicians Study and the
17 most recent paper on it?

18 A. I don't remember seeing this article.
19 I'm not an epidemiologist. I don't remember seeing
20 it.

21 Q. You mentioned Dr. Wynder and said during

22 your direct testimony many times various things
23 Dr. Wynder and Dr. Hoffmann, Dr. Dietrich Hoffmann,
24 had said. Do you remember that?

25 A. I remember referring to Professor Wynder
06029

1 and Dr. Hoffmann several times.

2 Q. Has Dr. Doll said about half of all
3 regular cigarette smokers will eventually be killed
4 by their habit?

5 THE COURT: All right. Just a minute.

6 MR. JAMES JOHNSON: Your Honor, I, again,
7 object to reading from documents that are not in
8 evidence. I also object to at this point trying to
9 use this witness, again, for an epidemiology study
10 when he said repeatedly that he knows very little
11 about the subject.

12 THE COURT: Objection sustained in both
13 respects.

14 Q. BY MR. WILNER: Dr. Townsend, you still
15 have the 1989 Surgeon General report with you?

16 A. Sure.

17 Q. As soon as I find mine, I'll ask you a
18 question.

19 A. I'll let you look on with me.

20 Q. Okay. I'll do it.

21 Okay. Please turn -- I'm sorry. Please
22 turn to page 94.

23 A. Okay.

24 Q. Table 11, "Likely Causative Agents for
25 Tobacco-related Cancers." Are you familiar with

06030

1 this?

2 A. I have seen this chart before.

3 Q. Under organ, lung and larynx, it shows,
4 PAH and NNK and below that polonium-210, minor
5 factor, acetaldehyde and formaldehyde. Do you see
6 that?

7 A. Yes.

8 Q. Under enhancing agents, catechol,
9 cocarcinogen, weakly acidic tumor promoters,
10 acrolein and chromaldehyde (phonetic). Do you see
11 that?

12 A. I see that. There's a question beside
13 chromaldehyde. But I think these have been the
14 center of various theories about cigarette smoking
15 and lung cancer.

16 The PAH as being benzopyrene, which we've
17 talked about. The NNK being tobacco-specific
18 nitrosamine. I think I did mention polonium-210 as
19 another theory that's been addressed.

20 The acetaldehyde, formaldehyde, acrolein,
21 chromaldehyde are all part of the ciliastasis
22 theory. Catechol of course is the phenol promoter
23 theory, which is one I talked about as well.

24 Q. Well, I'm going to ask you about each one
25 of those. But I think in your direct testimony

06031

1 weren't you saying something like the outside
2 doctors kept coming up with these theories, and
3 then we would respond to it? Wasn't that kind of
4 what your testimony was?

5 A. I think most of these theories were
6 developed by the medical and public health

7 community. I think we did very directly respond to
8 these theories as the medical and public health
9 community developed these various theories. These
10 theories pretty much, as far as I'm aware, all of
11 these theories had a chemical basis in their nature
12 which then led us, as chemists and cigarette
13 designers, to try to figure out how to address
14 those theories.

15 Q. Well, I'll get to the theories in a
16 minute. But doesn't -- isn't Reynolds in a better
17 position to know what's in its cigarettes than
18 anybody else?

19 A. We're in a better position to know what's
20 in our cigarettes. And, in fact, what we've done,
21 that Reynolds has identified somewhere in the
22 neighborhood of half of the 4,800 constituents that
23 are known in tobacco smoke. My competitors have
24 pretty much identified over half. A few academic
25 scientists outside the industry have identified

06032

1 some.

2 But, yes, we know probably more about
3 tobacco smoke and its nature than many other
4 organizations. But we published the work
5 and -- published the work and interact with
6 scientists like Wynder and Hoffmann, for example,
7 who do their own chemistry.

8 Q. And so why was Reynolds waiting for
9 people on the outside to come up with theories?
10 Why didn't Reynolds come up with the theories?

11 A. Because the outside medical and public
12 health community was, in fact, the scientists who
13 were trying to develop these biological
14 medical-based theories about why cigarette smoking
15 was --

16 Q. Well, why wasn't Reynolds doing that?

17 A. We've considered -- We've considered some
18 theories on our own. But they're not in the
19 mainstream of biology. We don't -- We're not at
20 the forefront of medical research. We contract
21 research. We conduct some internal research
22 ourselves. We do comparative biology. But we do
23 look to the scientific community, including the
24 medical community and the public health community,
25 for a variety of theories.

06033

1 Q. So if it didn't -- If someone else didn't
2 go to Reynolds and say, "Oh, by the way, this agent
3 in your cigarettes may be killing people," you
4 would just sit there --

5 A. No. That's --

6 Q. -- because it wasn't raised.

7 A. That's absolutely incorrect. We don't
8 just sit there. And if nobody came up with
9 theories, we wouldn't still sit there because we
10 would still take the approach, which is still
11 common sense, that less ought to be better. We
12 would still be trying to find out what's in
13 cigarette smoke. We would still be trying to
14 reduce the yields of tar and nicotine, and we would
15 still be, I'm convinced, trying to develop new
16 cigarette designs.

17 Q. Well, let's look at page 86 of the 1989

18 report. And this says tumorigenic agents in
19 tobacco and tobacco smoke. Begins with the PAHs,
20 which are the polycyclic aromatic hydrocarbons,
21 right?

22 A. That's right.

23 Q. Now, when you say this was a theory, were
24 you meaning that the theory was restricted to
25 benzoapyrene, one of these? Or are you calling all

06034

1 of the polyaromatic hydrocarbons just a theory?

2 A. Well, I don't know. I don't know what
3 you're trying to suggest by that. But let me tell
4 you -- Let me tell you what the right answer is.
5 In looking at benzopyrene we've considered that as
6 one because it's present in the highest
7 concentrations. We've considered that's only one
8 of the polycyclic aromatic hydrocarbons. It's a
9 marker, if you will.

10 And, yes, benzopyrene has been considered
11 very important in this theory because it was the
12 one that was thought to be a probable -- If you'll
13 notice here on the right-hand side of the chart
14 that you put up, a probable human carcinogen as
15 determined by IARC, the International Agency for
16 Research on Cancer.

17 But to say that we've looked at reducing
18 benzopyrene is incomplete only because benzopyrene
19 is a marker, and these other PAHs, polycyclic
20 aromatic hydrocarbons, go with benzopyrene. If you
21 reduce benzopyrene, you reduce them pretty much all
22 to the same degree.

23 Q. All right. So you were -- In 1966 were
24 you a chemistry student?

25 A. That's going way back. Actually I was in
06035

1 college in 1966, yes.

2 Q. You were in college in 66?

3 A. Yes.

4 Q. All right. And you became -- You were
5 studying chemistry?

6 A. Yes. I was taking chemistry classes in
7 1966. I think I was a math major at the time but
8 ultimately became a chemistry major.

9 Q. Well, let me hand you this book on
10 organic chemistry from 1966 and see if you know
11 what it is.

12 A. I can tell you exactly what it is from
13 here.

14 Q. Good.

15 MR. WILNER: May I hand the witness the
16 book?

17 THE COURT: All right.

18 Q. BY MR. WILNER: Have a look.

19 A. What specifically do you want me to look
20 at?

21 Q. Well, first, just look at the book. And
22 I'll have to get it back to read it because I only
23 have one copy. Do you recognize that as a
24 chemistry text, circa 1966?

25 A. Sure.

06036

1 Q. Something you might have had some contact
2 with?

3 A. Well, I had a copy of this exactly in
4 1966. I was taking a chemistry course that used
5 this, as I recall.

6 Q. Okay. Thanks.

7 Now, when did Reynolds publicly admit
8 that there were carcinogens in its product?

9 A. Well, R.J. Reynolds started pulling
10 together very intense research and development
11 effort in the early 50s. We identified benzopyrene
12 by -- as present in cigarette smoke by a number of
13 different techniques or a number of different
14 endpoint determinations. Other people had
15 suspected it. We talked yesterday about the
16 Reader's Digest article where benzopyrene was
17 suspected.

18 Other scientists had also identified
19 benzopyrene with --

20 THE COURT: I think this is probably a
21 good point to break. And I will probably, when we
22 come back tomorrow, urge a little bit more brevity
23 as we move toward the conclusion in terms of the
24 responses.

25 All right. Sheriff, let's adjourn until

06037

1 tomorrow morning at 10:00.

2 (Whereupon, the evening recess ensued at
3 4:32 p.m.)
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06038

1 COURT REPORTER'S CERTIFICATE
2 STATE OF TENNESSEE:
3 COUNTY OF SHELBY:

4 I, LORI-ANN MASON, RPR, do hereby certify:

5 1. The foregoing transcript of proceedings
6 was taken before me at the time and place stated in
7 the foregoing styled cause with the appearances as
8 noted;

9 2. Being a Court Reporter, I then reported
10 the transcript of proceedings in Stenotype to the
11 best of my skill and ability, and the foregoing
12 pages contain a full, true and correct transcript
13 of my said Stenotype notes then and there taken;

14 3. I am not in the employ of and am not
15 related to any of the parties or their counsel, and
16 I have no interest in the matter involved.
17
18
19

20 Lori-Ann Mason, RPR
21 Notary Public at Large
22 State of Tennessee
23
24
25

26 My commission expires:
27 August 29, 2001
28
29

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